

CLAIMS

1. A nonlinear circuit comprising:
 - a nonlinear element that amplifies an input signal
 - 5 in which a plurality of channels whose inter-slot boundary arrival times do not coincide are multiplexed;
 - a control section that controls a voltage or current supplied to said nonlinear element; and
 - 10 a selection section that selects timing at which said control section causes a set value of said voltage or said current to make a transition.
2. The nonlinear circuit according to claim 1, wherein said selection section selects timing at which said control section causes said set value of said voltage or said current to make a transition in synchronization with an arrival time of an inter-slot boundary in a plurality of said channels.
- 20 3. The nonlinear circuit according to claim 1, wherein said selection section selects timing at which said control section causes said set value of said voltage or said current to make a transition in synchronization with an arrival time of an inter-slot boundary in a plurality of said channels, and also predicts a highest value of said set value between a time at which said timing is selected and a time at which said timing is next selected,

notifies said control section of predicted said highest value, and causes said set value to make a transition to said highest value.

5 4. The nonlinear circuit according to claim 1, wherein, in a transient period until said voltage or said current actually supplied to said nonlinear element reaches said set value, said selection section does not select said timing for causing said set value to make a transition.

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5. The nonlinear circuit according to claim 1, further comprising a generation section that generates a trigger that causes said selection section to select said timing.

15 6. A radio communication apparatus equipped with the nonlinear circuit according to claim 1.

7. A nonlinear amplification method comprising:
an amplifying step of amplifying an input signal
20 in which a plurality of channels whose inter-slot boundary arrival times do not coincide are multiplexed;
a controlling step of controlling a voltage or current used in amplification in said amplifying step;
and
25 a selecting step of selecting timing at which a set value of said voltage or said current used in said controlling step is caused to make a transition.

8. The nonlinear amplification method according to
claim 7, further comprising a generating step of
generating a trigger that causes selection of said timing
5 in said selecting step.